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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,711	09/25/2003	Tetsuya Shimada	088473-0148	6374

22428 7590 12/08/2004

FOLEY AND LARDNER
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3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

LE, DAVID D

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 12/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,711

Applicant(s)

SHIMADA ET AL.

Examiner

David D. Le

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10 and 11 is/are rejected.
- 7) ☒ Claim(s) 5-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>09/25/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the first Office action on the merits of Application No. 10/669,711, filed 25 September 2003. Claims 1-11 are pending.

Documents

2. The following documents have been received and filed as part of the patent application:
 - Information Disclosure Statement, received on 09/25/03

Specification

3. The disclosure is objected to because of the following informalities:
 - Line 18 of page 6, the "ECU 21" should be --ECU 19--;
 - Line 22 of page 6, the "ECU 21" should be --ECU 19--;
 - Line 8 of page 9, the "ECU 21" should be --ECU 19--;
 - Line 15 of page 14, the "ECU 21" should be --ECU 19--; and
 - Line 30 of page 14, the "ECU 21" should be --ECU 19--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9:

- Line 3 recites the limitation “a vehicle”. It is unclear whether this mentioned “a vehicle” is different from the one that is previously recited on line 1 of the claim.

Claim 10:

- Line 6 recites the limitation “a vehicular engine”. It is unclear whether this mentioned “a vehicular engine” is different from the one that is previously recited on line 4 of the claim.
- Line 11 recites the limitation “a belt”. It is unclear whether this mentioned “a belt” is different from the one that is previously recited on line 6 of the claim.
- Line 12 recites the limitations “a primary pulley” and “a secondary pulley”. It is unclear whether these mentioned “a primary pulley” and “a secondary pulley” are different from the ones that are previously recited on lines 7-8 of the claim.
- Lines 10-13 recite the limitation “continuously variable transmission including a belt to transmit a revolution of a primary pulley to a secondary pulley driven by a revolution of the engine”. This limitation appears to repeat the limitation that is previously recited on lines 5-8 of the claim.

- Lines 17-18 recites the limitation “an original hydraulic”. It is unclear whether this mentioned “an original hydraulic” is different from the one that is previously recited on lines 14-15 of the claim.
- Line 19 recites the limitation “a hydraulic source”. It is unclear whether this mentioned “a hydraulic source” is different from the one that is previously recited on line 16 of the claim.
- Line 20 recites the limitation “a gear shift actuator”. It is unclear whether this mentioned “a gear shift actuator” is different from the one that is previously recited on line 17 of the claim.

Claim 11:

- Line 3 recites the limitation "the engine". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. ~~Claims 1-4 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by U.~~

S. Patent No. 5,199,399 to Shibuya.

Claims 1-4 and 10-11:

Shibuya (Figs. 1-4; column 2, line 24 – column 7, line 31) discloses a system and a method for controlling an engine idling speed for an internal combustion engine associated with an electro-continuously variable transmission comprising:

- An internal combustion engine (i.e., column 3, lines 40-41);
- A continuously variable transmission (i.e., column 3, lines 41-42);
- A belt (19);
- A primary pulley (16);
- A secondary pulley (17);
- An oil pump (21);
- A gear shift control section (being the control unit 14) for outputting the command signal to the gear shift actuator to supply the control hydraulic to the primary and secondary pulleys;
- A hydraulic pressure control valve mechanism (20) for controlling the optimum hydraulic pressure (i.e., column 4, lines 5-34);
- A plurality of shift control valves for controlling all gear shift ranges (i.e., column 4, lines 10-13);
- An electro-continuously variable transmission control unit (14) for determining whether a slip of the belt between at least one of the primary and the secondary pulleys has occurred;
- An engine control unit (30) for increasing the engine revolution speed to a speed that prevents the belt slip phenomenon (i.e., column 6, lines 59 – 66);

- Wherein the belt slip determining section determines if the belt slip therebetween occurs when the vehicle is started and the output section outputs the signal to command the engine control unit to increase an engine idling speed by the predetermined engine speed when the belt slip determining section determines that the slip therebetween occurs and when the vehicle is started (i.e., column 5, line 14 – column 6, line 66); and
- Wherein the gear shift controlling section outputs a signal indicating a demand on an output torque upper limit value to the engine control unit when outputting the signal to command the engine control unit to increase the engine idling speed by the predetermined engine speed (i.e., column 6, lines 59-66).

Allowable Subject Matter

8. Claims 5-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ui (U. S. Patent No. 6,530,860) teaches a line pressure control device for continuously variable transmission; wherein the speed of the internal combustion engine is increased to avoid slipping of the belt.

- Kashiwabara (U. S. Patent No. 5,720,692) teaches a method and an apparatus for controlling a continuously variable transmission; wherein the slipping of the transmission belt is prevented.
- Siemon (U. S. Patent No. 5,310,384) teaches a continuously variable transmission belt ratio measurement system; wherein an impending belt slip condition can be determined so that appropriate corrective action to stop belt slippage and prevent further belt slippage.
- Nozaki (U. S. Patent No. 6,757,603) teaches a slippage prevention apparatus of belt-type continuously variable transmission.

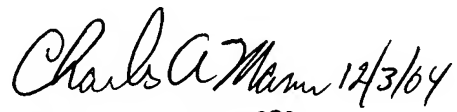
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 703-305-3690. The examiner can normally be reached on Mon-Fri (0700-1530).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ddl


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100-3681